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ABSTRACT

Participants in a program to raise the academic achievement of at-risk elementary school students in the Newark (New Jersey) School District by raising their self-esteem showed both increased self-esteem and achievement gains. The program included individual and group counseling sessions, parent participation, and the use of the Toward Affective Development (TAD) system and the Pumsey series. Two hundred seventy at-risk students were randomly assigned to a treatment group and 183 were assigned to a control group that received no treatment. More than three-fourths of the students in both groups were Black, while the remainder were of Hispanic or Portuguese backgrounds. The groups were compared using the following pre- and posttest measures: (1) the Coopersmith Self Esteem Inventory; (2) attendance; (3) the California Test of Basic Skills (CTBS); (4) parent participation; and (5) participation in counseling sessions. The following highlights are discussed: (1) social experiences with peers seemed to have more of an effect on self-esteem than either home or school experiences; (2) academic self-concept was significantly associated with classroom performance for Blacks and males; (3) while the program did have a significant impact on raising overall self-esteem, it did not have a significant impact on academic self-concept; and (4) the high absence rates of older students indicate the need for longer, more intensive intervention with this group. Statistical data are presented in 12 tables. A list of 32 references is appended. (FMW)

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CHANGING SELF-ESTEEM: THE IMPACT OF SELF-ESTEEM CHANGES ON AT-RISK STUDENTS ACHIEVEMENT

NEWARK BOARD OF EDUCATION
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Changing Self-Esteem: The Impact of Self-Esteem Changes on At-Risk Students Achievement

Elaine M. Walker

Introduction

It is ironic that, inspite of decades of formulations and reformulations in educational theories and practices, the problem of how best to educate students from disadvantaged backgrounds has not been solved. One of the most used terminology in educational dialogue today is "at-risk". Yet, when one examines the category of students to whom this label is applied, one sees that it is the same subgroup of pupils to whom such labels as "culturally-deprived", "disadvantaged", "underachievers" were once attached. Thus, the description that the at-risk student is likely to be one who is from a low socioeconomic background, lives in a single parent household, has low expectations about schooling, demonstrates low self-esteem, has lost control of his or her future and is likely to have experienced academic failure within the formal school system, is no different from that provided on the underachiever by Banfield in the 1960's (Banfield, 1960).

Historically, we have seen that the educational system, in its response to this population, and cognizant of its inability to radically alter those risk-producing factors outside of its purview, has focussed on generating strategies that will ameliorate those factors over which it has some degree of control. However, the effectiveness of these strategies has been constrained by two tendencies. First, according to a published report generated by the Urban Superintendents' Network, the tendency has been to center attention on the older at-risk student. Thus the intervention tends to occur late in the student's history (OERI, 1987: 7). Second, and related to the first point,

the intervention and strategies tend to be reactive in nature rather than proactive, frequently implemented after "failure" has occurred.

The at-risk constituency comprises a heterogeneous grouping of pupils, ranging from students who have dropped out of school, to students who although still in the formal school system are chronic underachievers (Mirman et. al; 1981). Consequently, the strategies for redressing their needs must be multifaceted. This paper presents the results of a study on the effects of a counseling program on the self-esteem and achievement of three hundred elementary students in grades three through eight who, based on their previous academic histories, were defined as being at "at-risk". All three hundred students had experienced at least two grade retentions and at the time of the intervention were performing below grade level.

A consistent finding which has emerged in the literature on the at-risk population is the centrality of the students' self-concept (Pressesisen, 1988;). Thus, at-risk students are frequently portrayed as having negative evaluative attitudes towards themselves in the areas of their academic, social, familial and general experiences. Consequently, it is assumed that if schools help these students to reevaluate their self-concepts, this is likely to reduce the propensity of them either dropping out or experiencing failure. The goal of this paper is to establish the tenability of this assumption. Many educators assume somewhat uncritically that the underachievement displayed by at-risk pupils is strongly associated with or related to their self-assessment and overall self-regard in a causal manner. However, it seems that a number of issues have to be explored before definitive pronouncements can be made. There is a need to clarify this assumption by looking at, for example, what impact if any do changes in self-concepts have on achievement. In accomplishing this, the paper will examine (1) the nature of the "at-risk"

problem, (11) the hypothesized relationship between self-esteem and achievement among at-risk pupils, (111) the effectiveness of attempts to change at-risk students self-concepts, and (IV) the implications of the results obtained for reducing a student's potential to become disconnected from school and society. The evaluation of the counseling program targeted for at risk-pupils in Newark affords us an opportunity to not only determine its effectiveness, but also to answer the broader questions which we have posed.

The Nature of the At-Risk Problem

In spite of a slight decrease in the dropout rate among some segments of the school-age population, as of 1988 over 4.2 million young adults between the ages of 16-24 did not possess a high school diploma (National Center for Education Statistics, 1988). These alarming statistics have evoked strong reactions from federal, state, and local governments. For example, new legislation passed by congress in 1988 mandated The National Center for Education statistics to conduct annual surveys of the nation's dropout and retention rates.[1] Similarly, the plethora of reform agendas proposing shifts in curriculum, instruction, and schooling for these students attest to the perceived gravity of the at-risk problem.

Concerns about the relatively high incidence of students at-risk of dropping out of school is influenced by the social, economic and political implications posed by the presence of a large pool of uneducated young adults concentrated for the most part in the most depressed economic areas of this country. Their presence threatens the very legitimacy of the major social

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[1](Amendment to the Several Education Provisions by the Hawkins - Strafford Elementary and Secondary School Improvement Amendment of 1988 (P.L. 100-297)

institutions and in particular the educational system as the major distributive agent of the human capital which these young adults need to function in society. It also signifies a failure of both liberal and conservative social policies. The legitimacy of the dominant educational structures in the education of disadvantaged populations has been questioned continuously throughout the decades. Consequently, as was noted, though recently coined as a new term, the "at-risk phenomenon" affecting the most marginalized sectors of our society predates the 1980's when the term was first introduced into educational jargon. Thus students "at-risk" are Black and latino youths who along with their families historically have been the most disadvantaged and disenfranchised members of the society. If these students are at-risk, what are they at-risk of, and why has the educational system not been able to effectively educate these youngsters? According to Jones (1988), the fundamental problem posed by the at-risk status for these students is a disconnection and alienation from the economic, educational and social opportunities available within the society. Thus, unable to assume the role of full citizenry, the at-risk individual by virtue of his/her background becomes trapped in the underclass status held by most members of his community. The at-risk population is therefore symptomatic of the failings which have existed over time at several institutional levels. In this vein, the educational system has been criticized for its failure to generate programs, curriculum and pedagogy that can effectively meet the needs of the at-risk youngster.

Self-Esteem and Achievement

The dominant educational system has been faulted for its insensitivity to the socioemotional needs of students from impoverished backgrounds (Wehlage, Rutter and Turnbaugh, 1987; Strother, 1986). Educational research has shown

that disadvantaged and at-risk students' self-concept is a cardinal variable in their educational success or failure (Soares and Soares, 1969). Current paradigms in the education of these youngsters stress the need to promote their personal and social development, which are seen to be inimical to the success of any program targeted for these students (Cities in Schools, 1986).

There is a long history of research purporting to establish a link between self-evaluation and academic achievement (Borislow, 1965; Fink, 1965; Byrne, 1984; Purkey, 1970; Zirkel & Moses, 1971; Hansford and Hattie, 1982). Byrne's (1984) meta-analysis of correlational studies between self-esteem concept and academic achievement found that the relationship between both persisted across subpopulations. Less definitive conclusions seemed forthcoming with respect to the issue of causality. Bridgeman and Shipman's (1978) longitudinal study of 404 children from disadvantaged backgrounds suggested that these students' self-concept, rather than predictive of academic achievement, was in fact formed by a reaction or response to achievement. Calsyn and Kenny (1977) found a similar directionality in their investigation of high school students. On the other hand Moyer (1980) and Pugh (1976) in their studies of high school students determined that the direction of causality flowed from self-concept to academic achievement. Regardless of these inconsistencies, there is a general agreement that students who are underachievers, or who perform poorly in school, tend to suffer losses in their self-esteem (Purkey, 1970; Ames, 1978; Gibby and Gibby, 1967; Hayes and Prinz, 1976). The cumulative effects of consistent failure and underachievement were found to have a powerful effect on students' self-concept (Kifer, 1975).

Studies which have focused on issues related to definition and conceptualization have provided us with conflicting yet at times complementary

viewpoints. Byrne (1984) identifies four theoretical positions on self-concept, a reiteration of which we will now provide. These positions differ in the degree to which self-concept is viewed as unitary or multidimensional, and in their conceptualization of the relationships between the facets of self-concept. The term self-esteem is taken to indicate an attitude, whether of approval or disapproval, that a person holds towards him or herself. It is an attitude which is conveyed to others, either verbally or by expressive behaviors.

The nomotheic viewpoint (Soares or Soares, 1983), as exemplified in the works of Rosenberg (1965) and Rosenberg & Simmons (1973), holds that self-concept or self-esteem is a unidimensional construct. In contrast, both the hierarchical and taxonomic models share a multidimensional interpretation of the self-concept. The hierarchical model proposed by the findings of Byrne (1982) and Shavelson & Bolus (1983) suggests that self-concept has multiple facets which can be ranked hierarchically, with the base being comprised of situation specific self-concepts and the apex a general self-concept. (Byrne, 1984: 430). On the other hand, the taxonomic model views the self-concept as being comprised of fairly specific facets which are semiautonomous. The compensatory model proposed by Winne and Marx (1981), which can be contrasted with the preceeding models, sees the self-concept as having a general facet and specific facets which may be inversely related. Lower status on one facet may be compensated by higher status on another. Winne and Marx in their study found, for example, that students who held poor academic self-concepts were likely to perceive themselves as relatively more successful on the physical and social facets of their self-concepts (Byrne, 1984: 430).

In explicating the relationship between self-esteem and achievement Handsford and Hattie (1982) conducted a meta analysis of 128 studies. The results of their meta analysis yield some insight into the general stability or instability of the relationships across different populations. Some of these findings have direct bearing on the research at-hand. First, the average correlation between self-esteem/self-concept and academic achievement was in the range of .21 to .26. In other words, the common variance shared between the variable was between 4 and 7 percent. No strong differences were found in this relationship for males and females. However, their analysis showed that an increase in the relationship existed from early elementary to secondary, but decreased at the college level (Hansford & Hattie, 1982: 129).

The findings with respect to socioeconomic status, although suggestive of a tendency for people with lower SES to have a less positive relationship between self-measures and achievement, was tenuous because of measurement problems with this variable. The strength of the relationship between self-esteem and achievement was higher for whites (.33) than blacks (.19).

The Intervention

Three hundred students with multiple histories of retention attending 30 elementary schools in the Newark School District were selected to receive intensive counseling in order to build their self-esteem. This program was jointly implemented by the Division of Guidance and the Division of Special Projects. Students met with a basic skills guidance counselor once a week for a forty minute group guidance session. In grades 3 through 6, the Toward Affective Development System (TAD), and the Pumsey series were used, while the Transition System developed by the American Guidance Service was used in grades 6-8. Each participant also had individual counseling services. In addition to the counseling activities, parents were also encouraged to

participate in parent workshops. These workshops based on the S.T.E.P. program focused on parenting skills and on teaching parents how to build their child's self-esteem at home.

Methodology

Sample:

The evaluation sample consisted of two hundred and seventy students who were part of the treatment group and a matched control group of one hundred and eighty three students who were not part of the counseling program. Selection to either group was random, and as evidenced by the data reported in Table 1, there are no strong differences between the groups prior to the start of the intervention. The reported means and standard deviations for the subscales of the Coopersmith Self Esteem Inventory (SEI) reflect no stark differences between the groups. The attendance and achievement data suggest that the scores of the control group were slightly higher, but a series of t-test analyses indicate that these differences were due primarily to chance (See Appendix A for t-test values).

A more detailed breakdown of the demographic characteristics of both the control and intervention groups provided in the table indicate the greater tendency for minority males to be at-risk. For example, roughly 68 percent of the intervention group and 71 percent of students in the control group were males. A greater percentage of the population were at the upper elementary level in contrast to the earlier and middle grades, and slightly more than three fourths of the students in both groups were black while the remainder were of hispanic and portuguese backgrounds.

Pre-Post Test Measurements:

Self-Esteem: Students were administered the long form of the Coopersmith Self Esteem Inventory at the beginning of the 1988-1989 school year and again

Table 1

Pretest Means for Treatment and Control

Variables	Treatment (234) $\bar{x}$ Group	S.D. (234)	Control (182) Group $\bar{x}$	S.D.
Self-Esteem Measures				
General	15.31	4.33	15.83	4.28
Social	5.70	1.57	5.68	1.69
Home	4.86	1.83	4.86	1.87
School	4.45	1.70	4.58	1.54
Academic Measures				
Reading	34.68	11.66	36.54	11.70
Writing	38.51	12.25	40.08	12.38
Mathematics	43.54	14.18	45.30	16.40
Attendance 1988	16.73	16.08	14.80	15.63
	Demographic Breakdown			
Ethnicity				
Hispanics	25%		28%	
Blacks	75%		72%	
Sex				
Females	32%		29%	
Males	68%		71%	
Grade Level				
3	3%		7%	
4	15%		9%	
5	18%		18%	
6	17%		20%	
7	27%		28%	
8	23%		18%	

at the end of the school year in May 1989.

Attendance: Attendance data on students were reported for the 1987-1988 school year and the 1988-1989 school year.

Achievement: Data on achievement was reported in two forms - as performance on the District standardized testing instrument the (CTBS) and as teacher assigned grades. These were reported for reading, writing and mathematics. The achievement data on the CTBS was reported for the 1987-1988 school year and for the 1988-1989 school year. Teacher assigned grades were reported only for the 1988-1989 school year but for all the marking periods.

Other Measures: The study included measures of parental involvement as evidenced by the number of parental meetings attended and the number of parents in attendance, also, data on the number of group and individual counseling sessions attended by students in the intervention group.

Data Analysis: The findings from the data analysis are presented in two major sections. The first attempts to provide some descriptive information on the "within" or nomological aspects of the self-esteem structure of students in the study. This analysis is based on the entire evaluation sample combined, and seeks to provide information on the ways in which the facets of at-risk students' self-concept are inter-related. Attempts are made in this section to look at differences in the structuring of these youngsters self-esteem on the basis of grade, gender and ethnicity. Finally, a "between-network" (see Byrne, 1984) analysis of the link between self-esteem and achievement prior to the intervention is conducted. The purpose of this phase of the study is to provide a baseline profile of the relationship between both measures against which the impact of the intervention can be assessed.

The second section of our findings focuses on student outcomes, both affective (self-esteem changes) and academic, associated with the intervention. The analysis draws upon differences between the intervention and control groups in order to infer whether or not attempts at changing at-risk youngsters' self evaluations have a positive and significant impact on their achievement.

Findings

I. At-Risk Students' Self-Concept

The emerging profile in the literature on the at-risk youngster is that he or she is likely to suffer some loss of self-esteem partially brought on by a pattern of chronic underachievement. In arriving at some understanding of the self evaluations held by students in the study prior to the intervention a series of descriptive and correlational statistics were calculated. This information is reported in Tables 2, 3, 4, 5, and 6 for the major subgroupings in the study. Thus, for example Table 2 presents the mean scores for the total SEI battery by grade, sex and ethnicity. The maximum possible score that can be obtained on the SEI is one hundred. As can be seen from Table 2 the average score for students in the study was 61.33. Data from studies utilizing minority students' performance on the Coopersmith provide a backdrop against which this score may be given interpretive meaning. Strodtbeck's (1972) study of 321 people between fourteen and seventeen living in Chicago and Washington, D.C., reported a mean of 73.6 for females, and 76.2 for males. Donaldson's (1974) investigation of public school children in grades 3 through 8 yielded an average score of 64.6 for Blacks and 63.6 for Spanish-surnamed students. Trowridge (1972) reported a mean score of 69.8 for students attending urban/surburban schools. Thus, the reported mean for this study is slightly below those cited above.

Table 2

Means and Standard Deviations for Total SEI Battery
(By Sex, Ethnicity and Grade Levels)

Group	$\bar{x}$	S.D.	N
Males	61.42	14.04	277
Females	61.15	15.71	124
Blacks	60.89	15.47	298
Hispanics	62.62	11.43	104
Lower Elem.	57.48	14.38	58
Middle Elem.	60.27	14.58	143
Upper Elem.	63.59	14.13	194
TOTAL	61.33	14.54	402

Maximum possible total score is 100.

In looking at the mean scores reported for the grade level clusters, in this study there is evidence of a monotonical increase in self-esteem associated with grade. Thus, at lower elementary grades (grades 3 and 4) the mean SEI score was 57.48, at the middle grades (grades 5 and 6) 60.27 and at the upper grades (grades 7 and 8) 63.59. This trend has also been noted by Donaldson (1972) on the Coopersmith in his study of 643 public school children in grades 3 through 8. Very little difference was found in the means and standard deviations for males and females. The mean score for males was 61.42, and for females 61.15. The mean SEI score for blacks was slightly lower than that for bilingual students, with a slightly larger standard deviation, suggesting a greater variability among the former group of pupils.

Much has been written on the multidimensional and hierarchical structure of self-concept (See March & Shavelson, 1985 and Shavelson et al. 1976). The correlations among the various facets of the self-concept of students in the present study allows us to shed some light on the structure of at-risk students' self-concept.

Grade Level Differences in At-Risk Students Self-Concept

Older pupils tend to be more positive in their evaluations of themselves in general, and in their social relationships, than are younger pupils. However, younger pupils tend to rate the facets related to school and home more favorably than older pupils (see the means reported in Table 3). Support for the multidimensionality of at-risk students' self-concept is provided by the data in Table 3 since, as can be gleaned from the table, the situational facets of the self-concept, eg. the social, home and school are more weakly correlated with each other as we go down the grade level. Indeed this observation is congruent with Marsh's (Marsh, Smith & Barnes, 1983; Cairns & Tidman, 1984; Marsh & O'Neil, 1984) findings that there is increasing

Table 3

Inter-Scale Correlation of SEI by Grade Level

	General Self	Social Self-Peers	Home Parents	School Academic
Lower Elem.				
General Self	1.00	.48*	.50*	.36*
Social Self		1.00	.38*	.32*
Home-Parents			1.00	.44*
School-Academic				1.00
$\bar{x}$	14.16	4.98	4.97	4.64
S.D.	4.30	1.65	1.60	1.68
Middle Elem.				
General Self	1.00	.42*	.46*	.44*
Social Self		1.00	.32*	.33*
Home-Parents			1.00*	.39*
School-Academics				1.00*
$\bar{x}$	15.28	5.52	4.80	4.54
S.D.	4.30	1.59	1.85	1.73
Upper Elem.				
General Self	1.00	.47*	.46*	.39*
Social Self		1.00	.25	.29
Home-Parents			1.00	.37
School-Academics				1.00
$\bar{x}$	16.32	6.05	4.93	4.49
S.D.	4.19	1.55	1.92	1.55

* Significant at p. 05

independence of self-concept facets with age.

The hierarchical nature of the relationship between the different facets of at-risk students' self-concept is underscored by the fairly stronger correlation between general self and the other specific factors than the sizes of the correlations among the specific factors themselves. Regardless of the grade level cluster, at-risk students' perceptions of themselves in general terms is influenced significantly by their perceptions of themselves in specific situations, such as at home, school and in their social interactions.

Ethnic Differences in Self-Concept Structure

The data reported for the two major ethnic groups reveal minimal differences in students' self evaluations on three of the four facets of their self-concepts; general, social and school. However, hispanic students rated their relationship at home more favorably than did black students. The correlations among the four components of the self-concept were significantly different for blacks and bilingual students. For black at-risk youngsters, their notions about themselves in general were more strongly correlated with their evaluations of themselves at home, school and in social interactions. Indeed, the correlation between their ratings of themselves in general, and their perceptions of themselves socially, academically and at home were .52 .43 and .50 respectively. In contrast the correlations for bilingual pupils were .34, .28 and .27 respectively. Among black at-risk youngsters, their overall evaluation of themselves is more strongly informed by the quality of their social experiences than by their experiences at home or at school. This observation is reinforced by the more favorable ratings which they gave to their social relationships in contrast to the other two.

The situation specific components of the self-concept structure were more autonomous of each other among bilingual at-risk youths than among black

Table 4

Inter-Scale Correlation of SEI by Ethnicity and Gender

	General Self	Social Self-Peers	Home Parents	School Academic
Spanish-Summary				
General Self	1.00	.34*	.28*	.27*
Social Self		1.00	.19	.15
Home-Parents			1.00	.31*
School-Academic				1.00
$\bar{x}$	15.67	5.76	5.04	4.84
S.D.	3.53	1.53	1.75	1.39
Blacks				
General Self	1.00	.52*	.43*	.43*
Social Self		1.00	.32*	.34*
Home-Parents			1.00	.40*
School-Academics				1.00
$\bar{x}$	15.56	5.67	4.81	4.41
S.D.	4.57	1.66	1.88	1.71
Males				
General Self	1.00	.49*	.46*	.38*
Social Self		1.00	.34*	.29*
Home-Parents			1.00	.36*
School-Academics				1.00
$\bar{x}$	15.61	5.70	4.92	4.48
S.D.	4.12	1.63	1.77	1.64
Females				
General Self	1.00	.48*	.46*	.46
Social Self		1.00	.19	.33*
Home-Parents			1.00	.44*
School-Academics				1.00
$\bar{x}$	15.54	5.70	4.78	4.59
S.D.	4.77	1.64	2.02	1.64

* Significant at p.05

youths. Thus, for bilingual pupils no significant correlations between the social self and both the academic self-concept as well as home-parent relationships were found. However, their academic self-concept was significantly correlated with their home-parent relationships (r=.31). For black youths all the correlations between the situation specific facets of their self-concept were significantly correlated. These findings suggest some instability in the inter-relationships among the self-esteem facets as a function of ethnicity.

Gender Differences in At-Risk Students Self-Concept Structure

There is a paucity of data on gender differences in self-concept structures, and what data is available have yielded for the most part inconsistent findings. Byrne and Shavelson study found, however, that the relations among self-concept structures differ across gender. The data in the present study provides partial support for their results. An examination of the means on the self-concept facets shows minimal difference between minority males and females. However, close scrutiny of the correlation matrices reveals some differences especially in the relationships involving academic self-concepts. For minority females, their academic self-concept is more strongly related to their general self-concepts (r=.46) and home relationships (r=.44) than is the case for males (r=.38 and .36 respectively). Thus, feelings about in-school experiences among minority females are less autonomous of the way they evaluate their experiences at home and their arrival of an overall attitude toward themselves. These findings reinforce the arguments advanced in the literature that students' self-concept is a multidimensional construct rather than an invariant structure unlikely to differ among groups.

At-Risk Students' Self-Concepts and Academic Achievement (Prior to the Intervention)

Hansford and Hattie's (1982) meta-analysis of the link between self-concept and achievement concluded that the relationship is unclear and imprecise. In fact the range in the size of the correlation between self-concept and achievement was from .12 preschool to .27 secondary. These correlations were based on a review of 128 studies. One could expect, therefore, in the present evaluation that the sizes of the correlation should fall somewhere within these ranges. Before examining the results, it needs to be pointed out that there is a constraining factor imposed on the data at hand because of the general way in which various facets of the self are measured on the Coopersmith. For example, the academic self subscale requires individuals to evaluate themselves within the classroom setting, and not in relation to a particular subject matter. Shavelson et al. (1976) have found that subject matter self-concepts are likely to be more highly correlated with achievement than more general academic self-concepts. With this cautionary statement made, we can now turn to a discussion of the link between self-concept and achievement among students prior to the intervention.

Grade Level

The data from the present investigation suggest that the relationship between self-concept and achievement is complex and somewhat problematic, based on a) what criterion of achievement is being used; b) the grade level at which the relationship is being examined, and c) the subject area for which the analysis is being done. At the lowest grades 3 and 4, using achievement data on the CTBS, an inverse relationship was found to exist between self-concept facets and achievement in reading (see Table 5). Although none of the correlations were significant all were above .10; with the correlation between reading and the social and academic facets being -.25 and -.26

Table 5

Correlation Between Self-Concept Facets
and Academic Achievement on Standardized
Testing Instrument and Teacher Assigned Grades
(By Grade Level)

	Reading	Mathematics	Writing
	CTBS (Tag)[a]	CTBS (Tag)	CTBS (Tag)
Lower Elem.			
General	- .16 (.11)	.22 (.15)	.16 (.04)
Social	- .25 (-.02)	.09 (.00)	-.08 (-.14)
Home	- .11 (-.06)	.22 (-.04)	-.08 (-1.17)
School	- .26 (.15)	.03 (.14)	-.05 (.17)
Middle Elem.			
General	.16 (.10)	.09 (.03)	.23* (.08)
Social	.16 (.19)	.11 (.21*)	.17 (.20*)
Home	.14 (-.03)	.11 (-.03)	.24* (.11)
School	.18 (.16)	-.04 (.09)	.15 (.21*)
Upper Elem.			
General	.17 (.10)	.11 (.05)	.18 (-.04)
Social	.10 (-.04)	.09 (-.05)	.18 (-.09)
Home	.13 (.11)	.11 (.01)	.10 (.06)
School	.16 (.19*)	.16 (.18*)	.19* (.14)

Note [a] Tag = Teacher Assigned Grades
* Significant at .05

respectively. At the middle grade levels, 5 and 6, five significant correlations were obtained, three involved various facets of students' self-concept and teacher assigned grades, and two involved performance on the CTBS.

Four of these correlations were obtained for writing. Students' perceptions of their social relationships and academic self-concepts were found to be positively and significantly related to their grades obtained from their classroom teachers in writing. The direction of the relationship implied that students who rated themselves more positively were apt to receive better grades in writing than those who perceived themselves more negatively. On the other hand, studens with fairly favorable notions of themselves in general, and of themselves at home, did better on the CTBS than those with less favorable opinions. In mathematics a significant correlation was found between students' evaluation of themselves socially and the grades received from teachers.

At the upper elementary levels (grades 7 and 8) students' evaluation of themselves in school was significantly correlated with the grades they obtained from teachers in reading and mathematics and the way they performed on the CTBS in writing. The interesting point that needs to be underscored is that the academic self-concept becomes a relatively more important factor in understanding the underachievement of at-risk youngsters at the upper grade levels than at earlier grades.

Ethnicity

The link between self-esteem and achievement appears to be more solidified among black at-risk youths than bilingual pupils. As can be seen from the data reported in Table 6, there were six significant correlations between various facets of black students' self-concepts and their academic

Table 6

Correlation Between Self-Concept Facet
and Academic Achievement on Standardized Testing
Instrument and Teacher Assigned Grades
(By Ethnicity and Gender)

	Reading		Mathematics		Writing	
	CTBS	(Tag)[a]	CTBS	(Tag)	CTBS	(Tag)
Hispanics						
General	.10	(.26*)	.19	(.02)	.22	(.12)
Social	- .02	(.06)	.12	(-.00)	.09	(-.02)
Home	- .01	(.11)	.01	(-.07)	-.01	(.10)
School	- .06	(.04)	-.06	(-.05)	.01	(.05)
Blacks						
General	.16*	(.08)	.14	(.08)	.24*	(.02)
Social	.17*	(.06)	.14	(.06)	.23*	(.05)
Home	.14	(.02)	.16*	(.01)	.16*	(.05)
School	.13	(.21*)	.07	(.21*)	.13	(.21*)
Males						
General	.17	(.13)	.10	(.05)	.25*	(.05)
Social	.11	(.07)	.08	(.05)	.18*	(.05)
Home	.12	(.09)	.11	(-.03)	.17*	(.04)
School	.09	(.21*)	-.00	(.13)	.11	(.20*)
Females						
General	.10	(.10)	.25*	(.10)	.20	(.02)
Social	.15	(.03)	.24*	(.04)	.24*	(.00)
Home	.07	(-.07)	.17	(.04)	.05	(.11)
School	.11	(.10)	.17	(.22*)	.11	(.11)

Note [a] Tag = Teacher Assigned Grades
* Significant at .05

performance. Three of these correlations involved the association between these students academic self-concepts and teacher assigned grades in reading, writing and mathematics. Interestingly enough there was remarkable consistency in the magnitude of the relationship for all three subject areas (r=.21). Only one significant correlation was observed for bilingual youths, and this involved the relationship between students' general self-concept and teacher assigned grade in reading.

Gender

There are some apparent differences in the relationship between some aspects of at-risk youths' self-concept and achievement on the basis of gender. The achievement of females in mathematics on the CTBS was significantly correlated with students' feelings about themselves in general, and their rating of themselves socially. The achievement of males in writing on the CTBS was significantly associated with their evaluations of themselves generally, in social situations and at home, while their academic self-concept was significantly correlated with their classroom grades in reading and mathematics.

The relationship between academic performance and self-esteem is quite unstable among the students in this study. Paralleling our earlier findings as to the complexity of the structure of students' self-esteem, the relationship between academic performance and self-esteem implies that student achievement in different subject areas and on different measures of determining achievement is likely to be differentially associated with various aspects of their self-esteem. The fact that their academic self-concept seems to have little bearing on the way they perform on the CTBS in contrast to their in-class performance signals the importance of teacher-pupil interaction in shaping the way "at-risk" pupils view schooling.

The Impact of Counseling on Changes in Self-Esteem and In-School Behaviors

The goal of the intervention was that through counseling, students at-risk would begin to feel more positively about themselves, which in turn would impact on their in-school behaviors such as attendance and academic performance. In determining the degree to which this goal was accomplished a number of analyses were conducted. First, an analysis of variance was done to establish whether there were any significant differences between the self-esteem scores obtained by students in the intervention program at the end of the school year and those obtained by students in the control group. This analysis was pursued separately for the major categories of students identified previously. Second, an analysis of covariance, in which previous achievement in the subject area is treated as a covariate, is used to test whether the performance of students in the intervention group at the end of the academic year was significantly different from that of students in the control group. Finally, the relationship between self-esteem and achievement is comparatively examined for students who received counseling and for those who did not.

II. Findings: Changes in Self-Esteem

Overall, students in the program showed greater improvement in their evaluations of themselves, than students who did not take part in counseling activities (see Table 7). However, the extent to which these differences were statistically meaningful varied. Following is a breakdown of the results by grade, ethnicity and gender statuses.

Grade Level

The results indicate that the self-esteem of students in the intervention program was higher at the end of the school year than those of students in the control group. This difference reached statistical significance at the fourth

Table 7

Results from Analysis of Variance of Differences on Posttest Total Self-Esteem Scores: Intervention Group vs. Control

Subgroup	Mean	Mean Square	F Value	Significance Level
Lower Grades				
Intervention	66.07	908.8	4.166*	.05
Control	57.75			
Middle Grades				
Intervention	64.64	40.6	.164	.69
Control	63.54			
Upper Grades				
Intervention	68.66	688.0	2.774	.10
Control	64.78			
Hispanics				
Intervention	71.62	1543.7	7.082*	.01
Control	64.08			
Blacks				
Intervention	65.30	325.1	1.300	.26
Control	63.10			
Males				
Intervention	68.12	1406.3	6.339*	.01
Control	63.47			
Females				
Intervention	64.45	43.6	.149	.70
Control	63.22			

and fifth grades, where the mean SEI score for the intervention group was 66.07, and for students in the control group 57.75.

Ethnicity

Bilingual pupils benefited significantly from the counseling. The average posttest SEI score for students in the intervention program was 71.62, and for students not in the program 64.08 (see Table 7). No significant difference in SEI scores were observed between students who were black who took part in the program and those who did not participate. However, the self-esteem of the former group of pupils tended to be slightly higher than that of the latter.

Gender

When we look at the self-esteem scores for males who received counseling versus the scores for those who received no counseling we see that the self-esteem of students in the program was significantly higher than that for students in the control group. For example, the mean SEI score for students who were part of the intervention was 66.02, in comparison to 64.00 for the control group. Although no significant differences were observed for females, the self-esteem scores for females who received counseling was slightly higher than the scores of those who did not receive counseling.

In what areas of their self-esteem did the intervention group showed the most improvement? In Appendix A, the mean pre and posttest ratings for the general, social, home and academic facets of students' self-concept are reported. Students in the intervention group showed the greatest improvement in their evaluations of themselves in general and the least improvement in their academic self-concepts. Of the various subgroups; female students showed the least improvement, with only a significant improvement in the rating of themselves in general.

III. Differences in Academic Performance Between Students In the Intervention and Students in the Control Group

As mentioned previously the intention of the intervention program was twofold. First, to bolster the self-esteem of the at-risk youngster through group and individual counseling, and second as a consequence of this to foster more successful in school behaviors such as academic achievement and attendance. The results from the preceding discussion showed that indubitably, the intervention program was successful in accomplishing the former. However, did this success translate or influence the achievement of pupils in reading, writing or mathematics? The findings presented below suggest that there were no significant differences in academic performance between students in the intervention group and those in the control group on either the District's standardized testing instrument (CTBS) or on teacher assigned grades, although when measured against themselves, some students in the intervention group did show improvement (also see Tables 8 through 10).

Reading

The effect sizes reported in Table 8 indicate that the impact of the program on students' achievement levels was greatest at the lower grades (.23). No differential effects were observed for blacks males, and slightly larger effects in favor of the control group were observed for the other category of pupils.

Grade

The F values reported in Table 8 suggest that there were no significant differences between students in the intervention group and those in the control group in their 1989 performance as measured either by the CTBS or by teacher assigned grades after controlling for previous achievement. However, at the fifth and fourth grades (lowest grades at which the intervention was implemented), students in the program showed significant improvement in their

Table 8

Pre-Posttest Comparisons of Achievement in Reading
Intervention Group vs. Control Group
(Standardized Results Reported Outside of Parenthesis,
Teacher Assigned Grade Within Parenthesis)

Group Status	N	1988 Achievement Level	1988 Standard Deviation	1989 Achievement Level	1989 Standard Deviation	T-Value	Effect Sizes[a]	F-Value (ANCOVA)
Grade Level								
Lower								
1. Intervention	25/33	31.48 (2.91)	10.62 (1.94)	35.20 (2.27)	11.99 (1.91)	1.06 (1.76*)	.23	.59 (1.33)
2. Control	25/28	31.28 (2.89)	12.03 (2.41)	32.76 (2.71)	10.39 (1.54)	.75 (.52)		
Middle								
1. Intervention	62/79	31.45 (2.83)	12.00 (1.85)	34.15 (2.90)	12.66 (1.88)	1.72* (.48)	-.29	.02 (.17)
2. Control	48/89	37.85 (3.17)	12.33 (1.99)	38.21 (2.99)	13.85 (1.88)	.20 (.74)		
Upper								
1. Intervention	93/115	38.27 (2.97)	10.91 (1.75)	35.09 (3.02)	15.15 (2.06)	2.11* (1.60)	-.33	.95 (.00)
2. Control	63/84	38.54 (3.13)	10.97 (2.00)	37.43 (3.33)	15.56 (2.06)	.66 (1.19)		
Ethnicity								
Hispanics								
1. Intervention	46/58	35.43 (3.17)	13.11 (1.61)	35.20 (3.02)	15.29 (1.71)	.09 (.69)	-.49	2.63 (2.40)
2. Control	37/51	39.84 (3.14)	12.16 (1.83)	41.78 (3.51)	13.49 (2.06)	.95 (1.23)		
Blacks								
1. Intervention	134/174	34.82 (2.82)	11.23 (1.89)	34.63 (2.97)	13.39 (2.09)	.17 (1.14)	-.03	.032(1.32)
2. Control	99/132	35.89 (3.11)	11.66 (2.13)	35.00 (2.96)	14.03 (1.84)	.73 (1.10)		
Gender								
Males								
1. Intervention	120/158	35.78 (2.93)	11.40 (1.86)	35.11 (2.91)	13.07 (1.93)	.50 (.19)	-.05	.05 (.128)
2. Control	91/130	36.48 (3.16)	12.83 (1.99)	35.86 (3.11)	15.26 (1.89)	.46 (.35)		
Females								
1. Intervention	59/73	33.15 (2.84)	12.21 (1.73)	34.61 (3.11)	15.06 (2.15)	.85 (1.45)	-.36	.15 (.149)
2. Control	45/53	37.93 (3.02)	9.77 (2.18)	38.84 (3.11)	11.59 (2.00)	.57 (.34)		

[a] calculated on basis of standardized results
*significant at .05

classroom performance in this subject area. At the middle grades (5 and 6) the intervention group showed significant improvement on the CTBS, while at the upper grade levels a significant decline was observed. Students in the control group showed no significant changes in their achievement.

Ethnicity

As is evident in the table neither the intervention group nor the control group registered any significant changes in their achievement in reading. This was the case for both black as well as bilingual students. The F values from the ANCOVA underscored the lack of significant differences between the intervention and control groups.

Gender

Similar to our observations for the ethnic categories above, there were no meaningful differences when gender is controlled. Among males for example, the 1989 achievement profile on the CTBS was virtually identical for both the intervention and control group (35.11 and 35.86 nce points respectively), while for females, classroom performance was exactly the same for both groups (3.11) (see Table 8).

Writing

Similar to the results discussed in reading, the relative magnitude of the effect sizes indicate that the intervention was more successful at the lower grades; had a more beneficial impact for females than males in the area of writing, and was slightly more positive in its effects on blacks in comparison to bilingual students.

Grade

In relation to where they were in their achievement in writing prior to being placed in the intervention, students at the lower and middle elementary grades showed significant improvement in writing on the CTBS. Students at the

middle grades showed further improvement in their classroom work in this subject area. At the lower grades (3 and 4), the differences in the performance between the intervention and control groups almost reached statistical significance ($F = 3.04$; $p = .08$) and is large enough 6.56 nce points to denote a substantive difference in favor of the intervention group. The pattern of achievement at the upper grades (7 and 8) was similar for both the control and intervention groups, decline on the CTBS, and significant improvement in classroom work.

Ethnicity

The program's impact on the achievement of bilingual pupils in this academic area as evidenced by the effect size reported in Table 9 was minimal. These pupils showed no significant improvement in writing, and consequently there was no substantial difference in favor of participants. Indeed, the posttest scores were higher for the control group. Although black students showed significant improvement in both their classroom work as well as on the CTBS, this progress was not large enough to result in any significant difference between themselves and students in the control group.

Gender

Male students in both the intervention group as well as the control group made significant strides in their performance in this subject area in their classroom assignments. The rate of improvement was about the same for both groups. Neither group registered any significant improvement on the CTBS, and given the similarities in performance, the results from the ANCOVA indicate no difference in achievement on the basis of group membership. In contrast, female students in the intervention group showed significant improvement on both the CTBS as well as in the grades received from teachers. Although females in the control group did not show any significant improvement on

Table 9

Pre-Posttest Comparisons of Achievement in Writing
Intervention Group vs. Control Group
(Standardized Results Reported Outside of Parenthesis,
Teacher Assigned Grade Within Parenthesis)

Group Status	N	1988 Achievement Level	1988 Standard Deviation	1989 Achievement Level	1989 Standard Deviation	T-Value	Effect Sizes[a]	F-Value (ANCOVA)
Grade Level								
Lower								
1. Intervention	25/30	32.76 (2.87)	13.49 (1.33)	41.00 (2.97)	16.15 (1.40)	2.40* (.49)	+.54	3.04 (1.47)
2. Control	25/27	32.80 (2.85)	12.49 (1.83)	34.44 (2.56)	12.11 (1.53)	.63 (.85)		
Middle								
1. Intervention	63/74	34.43 (2.50)	12.99 (1.51)	38.08 (3.01)	10.82 (1.72)	2.43* (2.61*)	-.50	1.47 (.541)
2. Control	48/64	41.54 (2.78)	15.32 (1.59)	43.02 (3.34)	9.86 (1.65)	.82 (2.63*)		
Upper								
1. Intervention	92/107	43.07 (3.05)	9.54 (1.67)	41.24 (3.63)	9.74 (1.99)	1.77* (3.06*)	-.10	.509(.303)
2. Control	63/79	43.11 (3.22)	9.11 (1.55)	42.27 (3.58)	10.07 (1.80)	.70 (1.99*)		
Ethnicity								
Hispanics								
1. Intervention	45/57	37.87 (2.81)	11.32 (1.59)	38.62 (3.04)	14.33 (1.79)	.35 (.91)	-.53	2.43 (.476)
2. Control	37/50	42.49 (2.88)	13.76 (1.88)	44.95 (3.30)	11.73 (2.01)	1.18 (1.48)		
Blacks								
1. Intervention	135/159	38.86 (2.84)	12.48 (1.62)	40.59 (3.42)	9.99 (1.91)	1.74* (4.17*)		
2. Control	99/122	39.98 (3.02)	12.32 (1.50)	39.66 (3.33)	10.12 (1.61)	.30 (2.18*)	-.09	1.54 (1.09)
Gender								
Males								
1. Intervention	120/149	38.97 (2.79)	11.92 (1.58)	39.61 (3.23)	10.75 (1.86)	.58 (2.96*)	-.14	.698(.266)
2. Control	91/125	40.24 (2.80)	12.59 (1.64)	41.27 (3.14)	11.22 (1.71)	.85 (2.21*)		
Females								
1. Intervention	59/66	37.78 (2.92)	13.05 (1.69)	41.05 (3.50)	12.26 (1.94)	1.99* (2.71*)	+.03	1.14 (.00)
2. Control	45/47	41.51 (3.45)	13.11 (1.47)	40.73 (3.81)	9.99 (1.72)	.48 (1.44)		

[a]calculated on basis of standardized results
*significant at .05

either measure of achievement, no significant differences between themselves and the intervention group was observed (F=1.14 and 0.00 for the CTBS and teacher grades respectively).

Mathematics

The findings in this area underscore the trend detected for both reading and writing, which points to the absence of substantial differences in achievement between the intervention group and the control group. The effect sizes suggest that participation in the program had minimal impact on student achievement in mathematics in contrast to the other two academic areas. The only subgroup of pupils for whom this observation was not true were students in the lower grades (refer to Table 10).

Grade

It was only at the middle elementary levels (fifth and sixth) that students in both the intervention and control group showed significant changes in achievement. Since the rate of change for the control group was much greater than that for the intervention group, it is difficult to attribute the improvement in the achievement of the intervention group solely to participation in the program. Significant declines in mathematics scores were noted for both groups of pupils at the upper elementary level. At the lower grades, although there was no improvement in achievement levels, an effect size of +.46 suggest that the difference in the posttest scores was in favor of participants.

Ethnicity

When we control for ethnicity neither black nor bilingual pupils in either group showed any significant change in their achievement levels. The F values from the analysis of covariance indicate that the performance of the control and intervention groups did not differ significantly when controls

Table 10

Pre-Posttest Comparisons of Achievement in Mathematics
Intervention Group vs. Control Group
(Standardized Results Reported Outside of Parenthesis,
Teacher Assigned Grade Within Parenthesis)

Group Status	N	1988 Achievement Level	1988 Standard Deviation	1989 Achievement Level	1989 Standard Deviation	T-Value	Effect Sizes[a]	F-Value (ANCOVA)
Grade Level								
Lower								
1. Intervention	25/33	45.00 (3.42)	21.23 (2.24)	45.64 (2.24)	15.79 (2.02)	.38 (3.13*)	+.46	2.31 (2.55)
2. Control	25/28	40.36 (2.71)	23.61 (2.40)	38.17 (2.68)	16.38 (1.96)	.48 (.08)		
Middle								
1. Intervention	63/79	41.54 (2.65)	12.87 (2.01)	46.30 (2.53)	17.06 (2.21)	2.16* (.47)	-.31	2.63 (.303)
2. Control	48/69	43.20 (2.72)	15.96 (1.84)	52.27 (2.74)	19.11 (1.92)	3.68* (.05)		
Upper								
1. Intervention	93/115	45.34 (2.75)	12.27 (2.08)	41.83 (3.00)	12.80 (2.14)	2.80* (1.51)	-.04	1.78 (.549)
2. Control	63/84	49.87 (3.10)	13.44 (2.24)	42.35 (3.04)	13.86 (2.13)	5.62* (.28)		
Ethnicity								
Hispanics								
1. Intervention	46/58	47.80 (2.93)	16.18 (2.14)	45.11 (2.74)	15.97 (2.16)	1.10 (.70)	-.22	1.15 (1.12)
2. Control	37/51	48.14 (2.9)	18.91 (2.29)	49.09 (3.12)	18.18 (2.14)	.23 (.63)		
Blacks								
1. Intervention	135/174	42.48 (2.76)	13.03 (2.05)	43.50 (2.70)	14.55 (2.15)	.75 (.38)	.00	.328(.00)
2. Control	99/132	44.89 (2.89)	16.14 (2.04)	43.61 (2.78)	16.59 (2.01)	.86 (.56)		
Gender								
Males								
1. Intervention	120/158	44.21 (2.84)	13.81 (2.14)	44.22 (2.70)	14.20 (2.17)	.01 (.78)	-.03	.01 (.02)
2. Control	91/130	45.88 (3.05)	18.00 (2.15)	44.75 (2.83)	17.96 (1.97)	.60 (1.12)		
Females								
1. Intervention	60/73	43.07 (2.75)	14.69 (1.93)	43.50 (2.71)	16.36 (2.11)	.20 (.21)	-.15	.15 (1.92)
2. Control	45/53	45.56 (2.49)	14.70 (1.96)	45.76 (2.98)	15.51 (2.23)	.08 (1.71)		

[a] calculated on basis of standardized results
*significant at .05

were introduced for their prior levels of achievement.

Gender

No differences in achievement outcomes were apparent between the intervention and control group when the effects of gender were partialled out. For both males as well as females the achievement levels on the CTBS were virtually the same for the control as well as intervention group.

IV. Changes in the Relationship Between Self-Esteem and Achievement

Although students in the program made significant changes in their self evaluations and demonstrated some improvement in their academic skills, the absence of strong differences between themselves and the control group raises the question as to whether or not the premise in the literature that changing self-esteem is crucial to turning around at-risk youngsters' behaviors needs to be examined more closely, certainly from the standpoint of causality.

It would appear from the present study that a year of counseling is likely to have its immediate impact more directly on the youngster's view of him or herself and may have only a delayed effect on achievement. If this is so, then there is an interest in exploring the degree to which counseling may have an impact on changing the structure of the relationship between self-concept and achievement, at least in the short term. The ensuing discussion explores this issue by making some comparisons between the post correlations between self-esteem and achievement and the correlations observed before the start of the intervention.

Tables 11 and 12 report the correlations obtained at the end of the year. These correlations were generally much stronger than those which were obtained at the beginning of the school year. However, it is instructive to note that the increase in the magnitude of the association between both variables is due primarily to changes among the control group. This occurred on both measures

Table 11

Correlation Between Post Achievement Levels (Standardized) and Post-Self Esteem Measures

	Reading	Writing	Mathematics
Lower Elem.			
General	.10[a](-.34)[b]	.04 (-.22)	.08 (-.29)
Social	-.21 (-.24)	-.02 (-.10)	.24 (-.37)
Home	-.13 (.03)	-.33 (.26)	.03 (.06)
Academic	-.19 (-.18)	-.16 (.06)	.19 (-.07)
Total	-.04 (-.21)	-.09 (-.07)	.15 (-.28)
Middle Elem.			
General	.13 (.09)	.17 (.35*)	.26 (.25)
Social	.08 (.16)	-.14 (.22)	.10 (.22)
Home	.04 (.18)	.17 (.12)	.21 (.05)
Academic	-.12 (.21)	-.07 (.41*)	-.08 (.26)
Total	.08 (.18)	.11 (.38*)	.23 (.26)
Upper Elem.			
General	.24*(.15)	.14 (-.02)	.30*(.18)
Social	.27*(.03)	.18 (.03)	.13 (.10)
Home	.16 (.12)	.01 (.16)	.16 (.16)
Academic	.10 (.30*)	.11 (.07)	.21 (.23)
Total	.25*(.21)	.14 (.07)	.28*(.23)
Hispanics			
General	.18 (.15)	.13 (-.05)	.21 (.14)
Social	.11 (.13)	.01 (-.11)	.28 (-.10)
Home	-.08 (.34)	-.09 (.20)	.28 (.11)
Academic	-.04 (.16)	-.08 (.04)	.23 (.00)
Total	.13 (.25)	-.09 (.01)	.34*(.08)
Blacks			
General	.19 (.05)	.17 (.22)	.20*(.18)
Social	.17 (.04)	.07 (.22)	.04 (.18)
Home	.16 (.04)	.03 (.16)	.12 (.13)
Academic	.02 (.26*)	.00 (.23)	.03 (.26*)
Total	.19 (.11)	.12 (.29*)	.16 (.25*)

Males			
General	.13 (.15)	.05 (.12)	.20 (.21)
Social	.12 (.06)	-.01 (.02)	.11 (.11)
Home	.02 (.19)	-.11 (.19)	.17 (.12)
Academic	-.08 (.33*)	-.06 (.13)	.09 (.19)
Total	.09 (.24*)	-.01 (.16)	.21*(.23)
Females			
General	.29 (-.03)	.31*(.20)	.24 (.12)
Social	.24 (.09)	.13 (.25)	.11 (-.00)
Home	.20 (.02)	.16 (.19)	.15 (.15)
Academic	.16 (-.06)	.12 (.28)	.08 (.13)
Total	.30*(.00)	.27 (.29)	.22 (.14)

[a] Intervention Group; [b] Control group

* p .05

of achievement: The CTBS and classroom grades. In fact, comparisons of the post correlations in Tables 11 and 12 for the control group with the correlations reported in Tables 4 and 5 show a substantial increase in the sizes of the former. The average size of the significant correlations between the self-esteem measures and achievement prior to the intervention was .21 for both the CTBS and teacher assigned grades. At the end of the school year the average size of the correlation for the intervention group was .22 on the CTBS and .29 on classroom grades. For the control group, the comparative means were .32 and .35 respectively.

Of the various facets of the students' self-esteem, academic self-concept bore the strongest relationship to achievement among students in the control group. For example, the correlation between academic self-concept and grades obtained in writing from classroom work among students in the control group in grades six and seven was .53. This facet of students' self-concept was also pivotal in the achievement of females and blacks within the classroom setting both for the intervention group as well as the control group.

V. Difference in Attendance Pattern

An examination of whether or not participation in the program resulted in fewer absences among the intervention group yielded no significant difference in attendance patterns among both groups with the exception of the upper grades. At the upper grade levels students in the intervention group had significantly greater absences than students in the control group. At the end of the school year the number of absences reported for the control group was 11 days, compared to 15 days for students in the intervention group. A F value of 4.239 was found to be significant at the .04 level. In trying to unravel this finding a number of correlations between attendance and several of the other measures in the study were calculated. The most important factor

Table 12

Correlation Between Post Achievement Levels (Teacher Assigned Grades) and Post-Self Esteem Measures

	Reading	Writing	Mathematics
Lower Elem.			
General	.16 (-.13)	.20 (-.00)	.18 (-.11)
Social	.09 (-.43)	.14 (-.26)	.40 (-.27)
Home	-.15 (-.32)	.21 (-.41)	.09 (-.17)
Academic	.17 (-.19)	.17 (-.36)	.36 (-.26)
Total	.11 (-.34)	.25 (-.28)	.30 (-.26)
Middle Elem.			
General	.09 (.34*)	.21 (.28)	.08 (.11)
Social	.10 (.14)	.12 (.26)	.15 (-.01)
Home	.09 (.18)	.11 (.16)	.14 (.14)
Academic	.03 (.41*)	.22 (.53*)	.16 (.35*)
Total	.11 (.36*)	.24 (.38*)	.16 (.18)
Upper Elem.			
General	.16 (.18)	.09 (.09)	.18 (.15)
Social	.08 (-.00)	.16 (.04)	-.00 (.00)
Home	.25*(.24)	.22 (.32*)	.19 (.18)
Academic	.32 (.20)	.29*(.23)	.31*(.17)
Total	.25*	.21 (.21)	.22 (.18)
Hispanics			
General	.16 (.16)	.00 (.01)	.12 (-.04)
Social	.10 (.03)	-.09 (-.07)	.20 (-.11)
Home	.06 (.23)	-.08 (.26)	.19 (.15)
Academic	.18 (.06)	.18 (-.02)	.38*(-.04)
Total	.19 (.17)	.03 (.05)	.25 (-.01)
Blacks			
General	.17 (.25*)	.26*(.29*)	.18 (.18)
Social	.10 (.02)	.19 (.20)	.09 (.05)
Home	.18 (.14)	.28*(.16)	.14 (.12)
Academic	.19 (.30*)	.26*(.36*)	.22*(.25*)
Total	.21*(.26*)	.33*(.35*)	.21*(.21)

Males			
General	.16 (.25*)	.14 (.19)	.18 (.20)
Social	.02 (.00)	.06 (.01)	.13 (-.02)
Home	.13 (.14)	.18 (.19)	.15 (.11)
Academic	.12 (.13)	.14 (.11)	.20*(.13)
Total	.16 (.22)	.18 (.19)	.22*(.17)
Females			
General	.17 (.17)	.22 (.24)	.08 (-.04)
Social	.22 (.07)	.31*(.31)	.09 (.03)
Home	.23 (.23)	.24 (.18)	.17 (.16)
Academic	.30*(.44*)	.40*(.44*)	.35*(.17)
Total	.28 (.28)	.36*(.35)	.20 (.06)

* p .05

which seemed to be associated with these students absenteeism was their prior classroom grade in reading (r= -.32). This was more important than their performance on the CTBS or their feelings about themselves, and implies that poor readers especially at the upper levels are more prone to be alienated from school than any other group of pupils.

Indeed, when we look at the relationship of previous classroom grades and scores on the CTBS with the self-esteem scores of these students at the end of the year, a number of interesting patterns emerged. First, only prior achievement in reading appears to be associated with self-esteem growth at the end of the school year. Second, teacher assigned grades in reading is significantly associated with academic self-concept (r=.25), while previous achievement on the CTBS in reading is related to feelings about the general self (r=.26). The implication of these findings is that older pupils in the intervention program who were poor readers were apt to feel poorly about themselves academically and in general than better readers.

Discussion and Conclusions

There are several findings from the present evaluation which are worth highlighting. These findings shed light on the nomological aspects of at-risk students' self-esteem, the relationship between self-esteem and academic achievement, the short term versus long term effects of changing at-risk students self-concepts, and the implications for future intervention programs. While the self-esteem scores of students in the study were generally below that reported by others studies on minority populations, it was evident that the attitudes which students held about themselves in general were influenced by a number of other relevant experiences. Among older pupils, school experiences became more central to the process by which students developed an overall evaluation about themselves than was the case with younger pupils.

The impact of home experiences was less significant in the development of general feelings about the self by most students than were the experiences with friends and peers. Indeed, students tended to rate themselves in social situations higher than they did either at home or in school. Not surprisingly, students rated their academic self-concept the lowest. This gives plausibility to the compensatory model of self-esteem which holds that individuals tend to compensate for negative feelings in one or more areas by positive feelings in others.

The link between self-esteem and achievement was fairly unstable, with the strength of the association varying for different subgroups of pupils. However, for blacks and males their academic self-concepts were significantly associated with their classroom performances. These findings have important implications for the development of intervention programs geared towards self-esteem building among at-risk students. Since the structure of the self-concept is likely to differ among subpopulations within the general at-risk population, as is the association between self-concept and achievement, the strategies employed to change students' attitudes towards themselves must somehow be developed to take account of this. Further, since we know that at-risk students do engage in some form of compensation when they evaluate themselves along the various dimensions of the self-concept, then one possible strategy for future short term intervention efforts may be to bolster these students' self-esteem in those areas in which they hold some favorable attitudes. It is difficult in short term counseling to turn around extremely problematic attitudes.

Interestingly, while the intervention in Newark was somewhat successful in changing the ways in which at-risk students viewed themselves overall, it was not as successful in changing students' academic self-concepts. If we

hold that academic self-concept evolves out of learning experiences and interactions with those "significant others" in the schooling process such as teachers, then clearly one could not expect the counseling to have any significant impact if the learning experiences in the wider school environment remained unchanged. However, while the direct effects on academic self-concept are therefore likely to be minuscule, our results suggest that in the short run at least, self-esteem building is likely to have an indirect impact on the relationship between self-esteem and achievement. Particularly, counseling seems to have an attenuating effect on this relationship in such a way that students in the intervention group who did not do well academically did not necessarily develop a poor academic self-concept as a consequence. Unlike the intervention group, poor achievement among students in the control group was likely to be more strongly associated with poor academic self-concept. Counseling may therefore be a very necessary early drop-out preventative strategy to use with elementary students who are experiencing failure in school.

The strategies for older pupils need to be different. The findings from this study suggest that older pupils in the intervention group tended to be absent more frequently from school than students in the control group. Further, the factor which distinguished those pupils in the eighth and seventh grades who were likely to have the greatest amount of absences was their reading ability. Poor readers were more likely to not only have more absences from school but also to have shown the least amount of growth in their self-esteem. These results underscore the findings reported by a study of the drop out phenomenon in Chicago which found that the two variables with the greatest predictive power in identifying students most likely to drop out are grade retention and reading ability. Intervention programs for older

pupils need to be more intensive, of longer duration and must have an explicit built in motivational component. Without some motivational aspect older pupils are likely to view any intervention program in which they are placed because of their academic or affective deficiencies in a suspicious and negative light.

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